

REMARKS

It is noted with appreciation that the Examiner withdrew the rejection previously made based on the amendment made to the claims in the Amendment of August 1, 2006.

The Rejection Over Fitzgerald

The Examiner rejected Claims 19-33 under 35 U.S.C. 102(b) as anticipated by Fitzgerald (US 6,746,998). This rejection is respectfully traversed.

It is noted that the Fitzgerald patent was Filed on May 23, 2002. The instant application is a divisional application of an application filed on June 7, 2002, now US 6,699,829, (and the instant claims are of the same scope as those of US 6,699,829).

Applicants are submitting herewith a Declaration under Rule 131 by Kyle Doyel, one of the inventors. In his Declaration, Mr. Doyel indicates that he conceived the invention at least as early as May 23, 2002. He submitted a disclosure of the invention to Herbert I. Cantor of the firm of Crowell & Moring LLP on May 23, 2002. A copy of the disclosure is attached to the Declaration as Exhibit 1. The parent application was filed on June 7, 2002, 15 days after submitting the disclosure to Mr. Cantor. That short period of time is, *per se*, evidence of diligence.

Accordingly, since the instant invention was made before the filing date of the Fitzgerald patent, the rejection should be withdrawn.

The Rejection Over Flynn

The Examiner rejected Claims 19-33 under 35 U.S.C. 102(b) as anticipated by Flynn (US 5,814,595). According to the Examiner Flynn teaches cleaning a solid substrate with a composition as defined in Flynn's Claim 8, the composition consists essentially of (a) perfluorobutyl ethyl ether and (b) an organic solvent, the solvent being trans-1,2-dichloroethylene. When boiled, the azeotrope

consists essentially of about 37 weight percent of the ether and about 63 percent of the trans-1,2-dichloroethylene. The Examiner also characterized Flynn's teaching of solvents as teaching a number of cosolvents, including alcohols, ethers, etc.

This rejection is respectfully traversed.

The Instantly Claimed Invention

In its broadest aspect, as defined in Claim 19, the instant invention is a method of cleaning a solid surface by treating that surface with a composition comprising:

(1) greater than about 50 weight percent of a dichloroethylene (one of which could be trans-1,2-dichloroethylene);

(2) one or more alkoxy-substituted perfluoro compounds containing six carbon atoms (one of which could be perfluorobutyl ethyl ether); and

(3) an additive selected from the group consisting of:

(a) a highly fluorinated compound of the formula CaFbHcXd ,
where a, b, c, X, and d are as defined in Claim 19, and combinations thereof;

(b) an enhancement agent selected from the group consisting of alcohols, esters, ethers, ketones, alkanes, aromatics, amines siloxanes, terpenes, etc. and mixtures thereof; and

(c) mixtures thereof.

Thus, the composition used in the claimed method is at least a ternary composition which must have the three enumerated ingredients, for instance, the trans-1,2-dichloroethylene, the perfluoro compound, and the enhancement agent.

Flynn Does Not Anticipate the Instant Claims

On the other hand, Flynn teaches a binary composition having two ingredients, namely, perfluorobutyl ethyl ether and a solvent. As shown in

Flynn's Claim 8, the solvent could be trans-1,2-dichloroethylene. This is discussed on page 8, at paragraph [0015] of the instant application where it is mentioned that US 5,814,595 (Flynn) and other patents

describe a number of binary azeotrope-like mixtures with two isomers of the perfluorobutyl ethyl ether. All binary combinations are shown to be flammable with the exception of azeotropes with the following halogenated solvents: hexafluoro-2-propanol, 1,2-dichloropropane and trans DCE. The combination with trans DCE is the most interesting aspect of this patent because the material forms an azeotrope-like product at 62.7 to 68.8 wt% trans DCE depending on the HFE-7200 isomer mixture.

At Column 1, line 66 - Column 2, line 23, Flynn broadly described the composition as *consisting essentially of* the hydrofluorocarbon ether and the solvent. The solvent could be an alcohol, ether, ester, etc. At Column 3, lines 30-38, Flynn mentions "1,2-trans-dichloroethylene", apparently as a solvent. This is clarified at Column 5, lines 45-63, where trans-1,2-dichloroethylene (line 58) is included in a list of solvents.

There are two specific examples using perfluorobutyl ethyl ether ("ether A") and trans-1,2-dichloroethylene. These are Examples 27 (see Table 2) and 109 (see Table 4). Both include a major proportion of trans-1,2-dichloroethylene, and both are binary.

So, what Flynn teaches is a composition *consisting essentially of* perfluorobutyl ethyl ether and trans-1,2-dichloroethylene and no other major component. The instantly claimed invention, however, is a ternary composition which includes (1) a dichloroethylene which could be trans-1,2-dichloroethylene, (2) an alkoxy-substituted perfluoro compounds containing six carbon atoms which could be perfluorobutyl ethyl ether, and (3) an additive which is either a

highly fluorinated compound as defined in Claim 19 or an enhancement agent as defined in Claim 19.

Consequently, it is clear that Flynn does not anticipate the instant claims. The rejection should, therefore, be withdrawn.

Since all the claims are clearly in condition for allowance and distinguish over the prior art of record, whether taken singly or in combination, an early Notice of Allowance is in order and the same is most earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket No. 056276.51245DV).

Respectfully submitted,

March 9, 2007

/Christopher T. McWhinney/
Herbert I. Cantor
Registration No. 24,392

Christopher T. McWhinney
Registration No. 42,875

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
HIC:CTM:mdm (2975328)